Illinois Department of
Natural Resources
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2010 Annual Water Use Audit Form (LMO-2)

This form must be completed by all Category IA and IIB Permittees for each annual water use accounting year running from October 1st through September 30th. This form must be submitted to the Department by January 3, 2011.

Section I - General Information

Name, address and phone number of Permittee:

_____
_____
_____
_____
_____

County_____

Name, address and phone number of the contact person for the Permittee:

_____
_____
_____
_____
_____

e-mail address _____

Authorized Official_____

Title_____

Date_____

Please provide leak survey information and population estimates for the last year.

Population_____ **Number of existing households**_____

The Illinois Department of Natural Resources is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under Chapter 19, Section 120.2 of the Illinois Revised Statutes. Disclosure of this information is required. Failure to provide any information will result in this form not being processed. This form has been approved by the Forms Management Center, Central Management Services.

Section II - Water Use Audit

Enter the amount of water pumped and utilized for each item shown below. All amounts entered in this section must be in units of million gallons per day (MGD) rounded off to 3 decimal places to the right of the decimal. Conversion calculations are provided for your use in Section IV to convert other commonly used units to MGD.

A. Pumpage Data

Water bought or received from the following distribution systems:

_____, _____

1. Lake Michigan Pumpage _____ MGD
2. Shallow Aquifer Pumpage _____ MGD
3. Deep Aquifer Pumpage _____ MGD
4. Total Pumpage (Add lines 1, 2 & 3) _____ MGD
5. Water Treatment Use _____ MGD
6. Gross Annual Pumpage (subtract line 5 from line 4) _____ MGD

Water sold or provided to any other distribution systems (enter the name of each system and the amount sold or provided to that system on lines 7 through 12). If additional lines are required, attach an additional sheet listing each system and amount.

7. _____ _____ MGD
8. _____ _____ MGD
9. _____ _____ MGD
10. _____ _____ MGD
11. _____ _____ MGD
12. _____ _____ MGD
13. Total (add lines 7-12 and any additional amounts) _____ MGD
14. Net Annual Pumpage (subtract line 13 from line 6) _____ MGD

B. Uses.

	Metered	Unmetered	Total	
15. Residential	_____	_____	_____	MGD
16. Commercial and Manufacturing	_____	_____	_____	MGD
17. Municipal	_____	_____	_____	MGD
18. Construction	_____	_____	_____	MGD
19. Total Uses (add Total lines 15 through 18)			_____	MGD
20. Percentage of Total Use to Net Annual Pumpage (divide line 19 by line 14 and multiply by 100)			_____	%

C. Hydrant Uses

21. Firefighting and Training _____ MGD
22. Water Main Flushing _____ MGD
23. Sewer Cleaning _____ MGD
24. Street Cleaning _____ MGD
25. Construction _____ MGD
26. Other (attach explanation) _____ MGD
27. Total Hydrant Use (add lines 21 through 26) _____ MGD
28. Percentage of Hydrant Use to Net Annual Pumpage (divide line 27 by line 14 and multiply by 100) _____ %
29. Department Requirement for Hydrant Use 1.0 %
30. Excessive hydrant use (subtract line 29 from line 28). If the percentage is greater than 0.0, attach explanation. [see Rule 730.307(e)] _____ %

D. Unavoidable Leakage and Unaccounted for Flow

31. Maximum Unavoidable Leakage (Do worksheet in Section III; enter amount from line 10 of the worksheet) ..... _____MGD
32. Percentage of Maximum Unavoidable Leakage to Net Annual Pumpage (divide line 31 by line 14 and multiply by 100) ..... _____%
33. Total Accounted for Flow (add lines 19, 27 and 31) ..... _____MGD
34. Percentage of Total Accounted for Flow to Net Annual Pumpage (divide line 33 by line 14 and multiply by 100) ..... _____%
35. Total Unaccounted for Flow (subtract amount on line 33 from line 14) _____MGD
36. Percentage of Total Unaccounted for Flow to Net Annual Pumpage (divide line 35 by line 14 and multiply by 100) ..... _____%

Please Check Your Calculations

The sum of lines 33 and 35 should equal line 14. If they do not equal, recheck your calculations.
The sum of lines 34 and 36 should equal approximately 100%. If not, check your calculations.

Section III - Maximum Unavoidable Leakage Worksheet

Complete the following calculations to determine your maximum unavoidable leakage. Enter the appropriate amounts in the spaces provided.

A. Cast Iron Pipes With Lead Joints

	Age of Pipe	Miles of Pipe	Leakage Rate*	Maximum Unavoidable Leakage**
1.	60 yrs. or greater	_____	x 3000 g/d/mi =	_____ g/d
2.	40-60 yrs.	_____	x 2500 g/d/mi =	_____ g/d
3.	20-40 yrs.	_____	x 2000 g/d/mi =	_____ g/d
4.	20 yrs. or less	_____	x 1500 g/d/mi =	_____ g/d

B. All Other Types of Pipes and Joints

5.	60 yrs. or greater	_____	x 2500 g/d/mi =	_____ g/d
6.	40-60 yrs.	_____	x 2000 g/d/mi =	_____ g/d
7.	20-40 yrs.	_____	x 1500 g/d/mi =	_____ g/d
8.	20 yrs. or less	_____	x 1000 g/d/mi =	_____ g/d
9.	Total Miles	_____	Total Leakage	_____ g/d

10. Total Maximum Unavoidable Leakage, in MGD (divide total leakage on line 9 by 1,000,000) ..... _____ MGD (Enter this amount on line 31)

* Leakage Rate expressed in gallons per day per mile (g/d/mi)
** Maximum Unavoidable Leakage expressed in gallons per day (g/d)

Section IV - Conversion Table

To convert cubic feet per year (cf) to (MGD) use:
cf x 7.48 ÷ 1,000,000 ÷ 365 = MGD
To convert gallons per year (g) to (MGD) use:
g ÷ 1,000,000 ÷ 365 = MGD
To convert gallons per day (g/d) to (MGD) use:
g/d ÷ 1,000,000 = MGD
To convert million gallons per year (mg) to (MGD) use:
mg ÷ 365 = MGD